

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION of  
Inventor(s): Mills

Group Art Unit: 1745

App'n Ser. No.: 09/110,678

Examiner(s): Kalafut for the  
*Secret Committee*

Filing Date: 07/07/1998

Title: INORGANIC HYDROGEN COMPOUNDS AND APPLICATIONS THEREOF



\* \* \* \* \*  
April 22, 2004

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Attached are PTO/SB/O8B forms listing the enclosed documents. Copies of the enclosed documents are attached to this Information Disclosure Statement and/or to the Attachments to the Response filed herewith.

If necessary, please accept this Information Disclosure Statement under Rule 97(c) and charge the requisite Rule 17(p) fee to our Deposit Account No. 50-0687 under Order No. 27462/62-226 for which purposes this paper is submitted in duplicate.

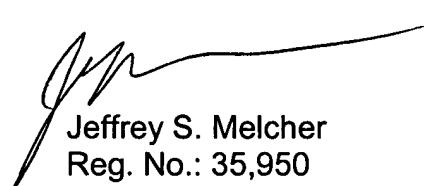
This information disclosure statement is intended to be in full compliance with the rules, but should the Examiner find any part of its required content to have been omitted, prompt notice that effect is earnestly solicited, along with additional time under Rule 97(f), to enable Applicant to comply fully. Consideration of the foregoing and enclosures plus the return of a copy of the herewith PTO/SB/08A and B forms with the

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Examiner's initials in the left column per MPEP 609 along with an early action on the  
merits of this application are earnestly solicited.

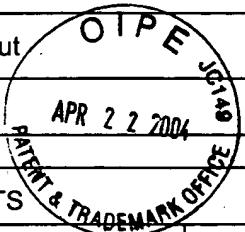
Respectfully submitted,  
Manelli Denison & Selter PLLC

By



Jeffrey S. Melcher  
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Customer No. 20736

<p>Substitute for form 1449B/PTO</p> <p><b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b></p> <p>(use as many sheets as necessary)</p>				<b>C mplete if Known</b>	
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				Examiner Name	Kalafut
Sheet	1	of	3	Attorney Docket Number	

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS					
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		Letter from Shelby T. Brewer to The Honorable James E. Rogan, December 21, 2001 and PTO response from Jason C. Roe, April 24, 2002 (see Attachment A)			
		PARK, "Patent Nonsense, Court Denies Blacklight Power Appeal", <i>What's New</i> , September 6, 2002, <a href="http://www.aps.org.WN/WN02/wn090602.html">www.aps.org.WN/WN02/wn090602.html</a> (see Attachment C)			
		RANDI, "Houdini and the Rabbi, The Patent Office Again, A Perpetual Motion/Emotion Car Breaks Down...", <i>Swift</i> , September 20, 2002, <a href="http://www.randi.org/jr/092002.html">www.randi.org/jr/092002.html</a> (see Attachment C)			
		VOSS, "New Physics' Finds a Haven At the Patent Office", <i>Science</i> , Vol. 284, pp. 1252-1254, May 21, 1999 (see Attachment D)			
		PTO Memorandum For All Employees: Media Contact Policy from Acting Assistant Secretary of Commerce and Acting Commissioner of Patents and Trademarks, June 22, 1999			
		Letter from Jeffrey S. Melcher to Ms. Esther Kepplinger, February 28, 2000 (see Attachment G)			
		Internet Discussion Forum, "Two Brand New Papers out at BLP's "What's New" page," message No. 7191 on Hydrino Study Group, <a href="http://groups.yahoo.com/group/hydrino/message/7191">http://groups.yahoo.com/group/hydrino/message/7191</a> , September 27, 2003 (see Attachment H)			
		Internet Discussion Forum, "Even Skeptics can lose Objectivity," message No. 7410 on Hydrino Study Group, <a href="http://groups.yahoo.com/group/hydrino/message/7410">http://groups.yahoo.com/group/hydrino/message/7410</a> , October 27, 2003 (see Attachment H)			

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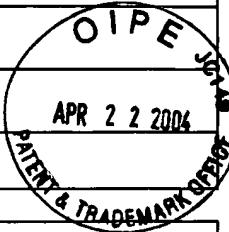
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		Internet Discussion Forum, "Two Competing Views of Reality Engage in a Battle for Total Control of Our Physics Paradigm", <u>Hydrino Study Group</u> , <a href="http://www.hydrino.org">http://www.hydrino.org</a> (see Attachment H)			
		Internet Discussion Forum, "Zimmerman's APS Centennial Meeting Talk", Transcript from Tom Stolper, November 10, 2003 (see Attachment H)			
		Internet Discussion Forum, "Zimmerman's APS Centennial Meeting Talk", Transcript from Peter Zimmerman and Tom Stolper, October 29, 2003 (see Attachment H)			
		Internet Discussion Forum, "Zimmerman's APS Centennial Meeting Talk", Transcript from Tom Stolper, October 28, 2003 (see Attachment H)			
		Internet Discussion Forum, "HSG: Even skeptics can lose objectivity", Transcript from Steve Menton, October 26, 2003 (see Attachment H)			
		Internet Discussion Forum, "HSG: Zimmerman's Insincere Questions", Transcript from Peter Zimmerman and Steve Menton, September 25, 2003 (see Attachment H)			
		Internet Discussion Forum, "Re: Re: Zero Electrostatic Self-Interaction Justified", Transcript from Peter Zimmerman, May 22, 2003 <a href="http://groups.yahoo.com/group/hydrino/message/6052">http://groups.yahoo.com/group/hydrino/message/6052</a> (see Attachment H)			
		Internet Discussion Forum, "HSG: Re: Bool Review by Dr. John Farrell", Transcript from Peter Zimmerman, February 23, 2004 (see Attachment H)			
		"Regarding PZ's Departing Post", includes many public posts on hydrino study group, pp 1-75 (see Attachment I)			
		PARK, "Perpetual Motion: Still Going Around", Special to the Washington Post, January 12, 2000, Page H03 (see Attachment J)			
		Letter from Jeffrey S. Melcher to Ms. Esther Kepplinger with Attachments A-E, January 19, 2001 (see Attachment K)			
		PLATT, "Testing the Current", The Washington Post, June 25, 2000, Page X05 (see Attachment M)			
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		USPTO Communication re Interview scheduled for February 21, 2003, February 12, 2001(see Attachment N)			
		Letter from Senator Ron Wyden to The Honorable Todd Q. Dickinson with attachments, April 5, 2000 (see Attachment O)			
		Letter from Senator Robert G. Torricelli to Nicholas P. Godici with attachments, July 20, 2001(see Attachment O)			
		Letter from Senator Jon S. Corzine to The Honorable Todd Q. Dickinson with attachments, August 2, 2001 (see Attachment O)			
		Letter from Senator Max Cleland to Ms. Jane Cooksey with attachments, March 24, 2000 (see Attachment O)			
		Letter from Senators Max Cleland and Ron Wyden to Chairman Patrick Leahy, December 20, 2001 (see Attachment O)			
		Letter from Senators Max Cleland and Ron Wyden to The Honorable Donald L. Evans, December 20, 2001 (see Attachment O)			
		Letter from Senators Jon S. Corzine and Robert G. Torricelli to The Honorable Donald L. Evans, December 21, 2001 (see Attachment O)			
		Email re Interview Summary from Jeffrey Simenauer to Ted Liu, February 13, 2003 (see Attachment P)			
		"APS E-Board Pases Resolution on Perpetual Motion Machines", <i>APS NEWS ONLINE</i> , August/September 2002, <a href="http://www.eps.org/aps/apsnews/0802/080212.html">http://www.eps.org/aps/apsnews/0802/080212.html</a> (see Attachment Q)			
		Letter from Elizabeth Barlow to John Allen, March 17, 2004 (see Attachment R)			
		Letters from John Allen to Office of Counsel, US Department of Commerce with attachments, May 12, 2003, June 7, 2003, and March 10, 2004 (see Attachment R)			
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	57	R. L. Mills, P. Ray, "Spectroscopic Characterization of Stationary Inverted Lyman Populations and Free-Free and Bound-Free Emission of Lower-Energy State Hydride Ion Formed by a Catalytic Reaction of Atomic Hydrogen and Certain Group I Catalysts, Quantitative Spectroscopy and Radiative Transfer, No. 39, sciedirect.com, April 17, (2003). Attachment 57	
	56	R. M. Mayo, R. Mills, "Direct Plasmodynamic Conversion of Plasma Thermal Power to Electricity for Microdistributed Power Applications," 40th Annual Power Sources Conference, Cherry Hill, NJ, June 10-13, (2002), pp. 1-4. (Web Publication Date: March 28, 2002.) Attachment 56	
	55	R. Mills, P. Ray, R. M. Mayo, "Chemically-Generated Stationary Inverted Lyman Population for a CW HI Laser," European J of Phys. D, submitted. (Web Publication Date: April 22, 2002.) Attachment 55	
	54	R. L. Mills, P. Ray, "Stationary Inverted Lyman Population Formed from Incandescently Heated Hydrogen Gas with Certain Catalysts," J. Phys. D, Applied Physics, Vol. 36, (2003), pp. 1504-1509. (Web Publication Date: March 20, 2002.) Attachment 54	
	53	R. Mills, "A Maxwellian Approach to Quantum Mechanics Explains the Nature of Free Electrons in Superfluid Helium," Low Temperature Physics, submitted. (Web Publication Date: June 4, 2002.) Attachment 53	
	52	R. Mills and M. Nansteel, P. Ray, "Bright Hydrogen-Light Source due to a Resonant Energy Transfer with Strontium and Argon Ions," New Journal of Physics, Vol. 4, (2002), pp. 70.1-70.28. (Web Publication Date: October, 2002, when it became available on the New Journal of Physics website.) Attachment 52	
	51	R. Mills, P. Ray, R. M. Mayo, "CW HI Laser Based on a Stationary Inverted Lyman Population Formed from Incandescently Heated Hydrogen Gas with Certain Group I Catalysts," IEEE Transactions on Plasma Science, Vol. 31, No. 2, (2003), pp. 236-247. (Web Publication Date: Feb. 4, 2002.) Attachment 51	
	50	R. L. Mills, P. Ray, J. Dong, M. Nansteel, B. Dhandapani, J. He, "Spectral Emission of Fractional-Principal-Quantum-Energy-Level Atomic and Molecular Hydrogen," Vibrational Spectroscopy, Vol. 31, No. 2, (2003), pp. 195-213. Attachment 50	

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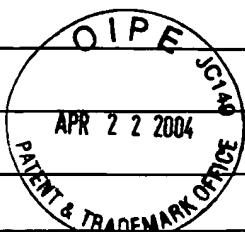
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	65	R. Mills, P. Ray, R. M. Mayo, "Spectroscopic Evidence for CW H I Lasing in a Water-Plasma," J. of Applied Physics, submitted. (Web Publication Date: Sept. 18, 2002.) Attachment 65	
	64	R. L. Mills, J. Sankar, A. Voigt, J. He, B. Dhandapani, "Low Power MPCVD of Diamond Films on Silicon Substrates," Journal of Vacuum Science & Technology A, submitted. (Web Publication Date: June 26, 2002.) Attachment 64	
	63	R. L. Mills, X. Chen, P. Ray, J. He, B. Dhandapani, "Plasma Power Source Based on a Catalytic Reaction of Atomic Hydrogen Measured by Water Bath Calorimetry," Thermochimica Acta, Vol. 406, Issue 1-2, (2003), pp. 35-53. (Web Publication Date: June 25, 2002.) Attachment 63	
	62	R. L. Mills, A. Voigt, B. Dhandapani, J. He, "Synthesis and Spectroscopic Identification of Lithium Chloro Hydride," Materials Characterization, submitted. Attachment 62	
	61	R. L. Mills, B. Dhandapani, J. He, "Highly Stable Amorphous Silicon Hydride." Solar Energy Materials & Solar Cells, Vol. 80, No. 1, pp. 1-20. (Web Publication Date: April 15, 2002.) Attachment 61	
	60	R. L. Mills, J. Sankar, A. Voigt, J. He, B. Dhandapani, "Synthesis of HDLC Films from Solid Carbon," Journal of Material Science, in press. (Web Publication Date: May 3, 2002.) Attachment 60	
	59	R. Mills, P. Ray, R. M. Mayo, "The Potential for a Hydrogen Water-Plasma Laser," Applied Physics Letters, Vol. 82, No. 11, (2003), pp. 1679-1681. (Web Publication Date: July 11, 2002.) Attachment 59	
	58	R. L. Mills, "Classical Quantum Mechanics," Physics Essays, submitted. (Web Publication Date: May 23, 2002.) Attachment 58	

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	73	R. L. Mills, P. Ray, B. Dhandapani, J. He, "Energetic Helium-Hydrogen Plasma Reaction," AIAA Journal, submitted. (Web Publication Date: July 26, 2002.) Attachment 73			
	72	R. L. Mills, M. Nansteel, P. C. Ray, "Bright Hydrogen-Light and Power Source due to a Resonant Energy Transfer with Strontium and Argon Ions," Vacuum, submitted. Attachment 72			
	71	R. L. Mills, P. Ray, B. Dhandapani, J. Dong, X. Chen, "Power Source Based on Helium-Plasma Catalysis of Atomic Hydrogen to Fractional Rydberg States," Contributions to Plasma Physics, submitted. Attachment 71			
	70	R. Mills, J. He, A. Echezuria, B. Dhandapani, P. Ray, "Comparison of Catalysts and Plasma Sources of Vibrational Spectral Emission of Fractional-Rydberg-State Hydrogen Molecular Ion," European Journal of Physics D, submitted. (Web Publication Date: Sept. 2, 2002.) Attachment 70			
	69	R. L. Mills, J. Sankar, A. Voigt, J. He, B. Dhandapani, "Spectroscopic Characterization of the Atomic Hydrogen Energies and Dehsities and Carbon Species During Helium-Hydrogen-Methane Plasma CVD Synthesis of Diamond Films," Chemistry of Materials, Vol. 15, (2003), pp. 1313–1321. (Web Publication Date: Dec. 31, 2002.) Attachment 69			
	68	R. Mills, P. Ray, R. M. Mayo, "Stationary Inverted Balmer and Lyman Populations for a CW HI Water-Plasma Laser," IEEE Transactions on Plasma Science, submitted. (Web Publication Date: Aug. 16, 2002.) Attachment 68			
	67	R. L. Mills, P. Ray, B. Dhandapani, J. He, "Extreme Ultraviolet Spectroscopy of Helium-Hydrogen Plasma," J. Phys. D, Vol. 36, (2003), pp. 1535–1542. (Web Publication Date: July 17, 2002.) Attachment 67			
	66	R. L. Mills, P. Ray, "Spectroscopic Evidence for a Water-Plasma Laser," Europhysics Letters, submitted. (Web Publication Date: Sept. 19, 2002.) Attachment 66			

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	80	R. L. Mills, "The Fallacy of Feynman's Argument on the Stability of the Hydrogen Atom According to Quantum Mechanics," Foundations of Phys., submitted. (Web Publication Date: Jan. 27, 2003.) Attachment 80		
	79	R. Mills, J. He, B. Dhandapani, P. Ray, "Comparison of Catalysts and Microwave Plasma Sources of Vibrational Spectral Emission of Fractional-Rydberg-State Hydrogen Molecular Ion," Canadian Journal of Physics, submitted. Attachment 79		
	78	R. L. Mills, P. Ray, J. Dong, M. Nansteel, B. Dhandapani, J. He, "Vibrational Spectral Emission of Fractional-Principal-Quantum-Energy-Level Molecular Hydrogen," Bulletin of the Chemical Society of Japan, submitted. (Web Publication Date: Sept. 9, 2002.) Attachment 78		
	77	J. Phillips, R. L. Mills, X. Chen, "Water Bath Calorimetric Study of Excess Heat in 'Resonance Transfer' Plasmas," Journal of Applied Physics, submitted. (Web Publication Date: June 16, 2003.) Attachment 77		
	76	R. L. Mills, P. Ray, B. Dhandapani, X. Chen, "Comparison of Catalysts and Microwave Plasma Sources of Spectral Emission of Fractional-Principal-Quantum-Energy-Level Atomic and Molecular Hydrogen," Journal of Applied Spectroscopy, submitted. (Web Publication Date: Feb. 12, 2002.) Attachment 76		
	75	R. L. Mills, P. Ray, B. Dhandapani, J. He, "Novel Liquid-Nitrogen-Condensable Molecular Hydrogen Gas," Acta Physica Polonica A, submitted. (Web Publication Date: Oct. 29, 2002.) Attachment 75		
	74	R. L. Mills, P. C. Ray, R. M. Mayo, M. Nansteel, B. Dhandapani, J. Phillips, "Spectroscopic Study of Unique Line Broadening and Inversion in Low Pressure Microwave Generated Water Plasmas," Physics of Plasmas, submitted. (Web Publication Date: June 18, 2003.) Attachment 74		

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	88	R. Mills, J. Sankar, A. Voigt, J. He, P. Ray, B. Dhandapani, "Role of Atomic Hydrogen Density and Energy in Low Power CVD Synthesis of Diamond Films," JACS, in preparation. Attachment 88	
	87	R. Mills, B. Dhandapani, M. Nansteel, J. He, P. Ray, "Liquid-Nitrogen-Condensable Molecular Hydrogen Gas Isolated from a Catalytic Plasma Reaction," J. Phys. Chem. B, submitted. Attachment 87	
	86	R. L. Mills, P. Ray, J. He, B. Dhandapani, M. Nansteel, "Novel Spectral Series from Helium-Hydrogen Evenson Microwave Cavity Plasmas that Matched Fractional-Principal-Quantum-Energy-Level Atomic and Molecular Hydrogen," European Journal of Physics, submitted. (Web Publication Date: April 24, 2003.) Attachment 86	
	85	R. L. Mills, P. Ray, R. M. Mayo, "Highly Pumped Inverted Balmer and Lyman Populations," New Journal of Physics, submitted. Attachment 85	
	84	R. L. Mills, P. Ray, J. Dong, M. Nansteel, R. M. Mayo, B. Dhandapani, X. Chen, "Comparison of Balmer $\alpha$ Line Broadening and Power Balances of Helium-Hydrogen Plasma Sources," Plasma Sources Science and Technology, submitted. (Web Publication Date: March 12, 2003.) Attachment 84	
	83	R. Mills, P. Ray, M. Nansteel, R. M. Mayo, "Comparison of Water-Plasma Sources of Stationary Inverted Balmer and Lyman Populations for a CW HI Laser," J. Appl. Spectroscopy, in preparation. Attachment 83	
	82	R. Mills, J. Sankar, P. Ray, J. He, A. Voigt, B. Dhandapani, "Synthesis and Characterization of Diamond Films from MPCVD of an Energetic Argon-Hydrogen Plasma and Methane," J. of Materials Research, submitted. (Web Publication Date: May 7, 2003.) Attachment 82	

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	97	R. L. Mills, P. Ray, B. Dhandapani, "Evidence of an Energy Transfer Reaction Between Atomic Hydrogen and Argon II or Helium II as the Source of Excessively Hot H Atoms in RF Plasmas," Contributions to Plasma Physics, submitted. (Web Publication Date: Sept. 26, 2003.) Attachment 97	
	96	J. Phillips, C.K. Chen, R. L. Mills, "Evidence of the Production of Hot Hydrogen Atoms in RF Plasmas by Catalytic Reactions Between Hydrogen and Oxygen Species," J. Phys. D., submitted. (Web Publication Date: Sept. 12, 2003.) Attachment 96	
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	94	R. L. Mills, "The Nature of the Chemical Bond Revisited and an Alternative Maxwellian Approach," Physics Essay 94, submitted. (Web Publication Date: Aug. 6, 2003.) Attachment 94	
	93	R. L. Mills, P. Ray, M. Nansteel, J. He, X. Chen, A. Voigt, B. Dhandapani, "Energetic Catalyst-Hydrogen Plasma Reaction Forms a New State of Hydrogen," in preparation. Attachment 93	
	92	R. L. Mills, P. Ray, M. Nansteel, J. He, X. Chen, A. Voigt, B. Dhandapani, Luca Gamberale, "Energetic Catalyst-Hydrogen Plasma Reaction as a Potential New Energy Source," European Physical Journal D, submitted. (Web Publication Date: June 6, 2003.) Attachment 92	
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Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO				C mplet if Known	
				Application Number	09/110,678
				Filing Date	07/07/1998
				First Named Inventor	Mills
				Group Art Unit	1745
				Examiner Name	Kalafut
Sheet	7	of	7	Attorney Docket Number	APR 22 2004

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T <sup>2</sup>
	98	R. L. Mills, Y. Lu, J. He, M. Nansteel, P. Ray, X. Chen, A. Voigt, B. Dhandapani, "Spectral Identification of New States of Hydrogen," J. Phys. Chem. B, submitted. (Web Publication Date: Nov. 18, 2003.) Attachment 98			
	99	R. L. Mills, Y. Lu, B. Dhandapani, "Spectral Identification of H <sub>2</sub> (1/2)," submitted. Attachment 99			
	100	R. Mills, B. Dhandapani, J. He, "Highly Stable Amorphous Silicon Hydride from a Helium Plasma Reaction," Materials Science and Engineering, submitted. (Web Publication Date: Nov. 17, 2003.) Attachment 100			
	101	R. L. Mills, Y. Lu, Nansteel, J. He, A. Voigt, B. Dhandapani, "Energetic Catalyst-Hydrogen Plasma Reaction as a Potential New Energy Source," Division of Fuel Chemistry, Session: Chemistry of Solid, Liquid, and Gaseous Fuels, 227 <sup>th</sup> American Chemical Society National Meeting, March 28-April 1, 2004, Anaheim, CA. Attachment 101			

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